Preliminary Requirements for VDC Resources Form

Purpose:

The purpose of this document is to provide the VDC staff with advance notice of pending requirements and identify major cost drivers. This should include the best information available at the time (prior to IRB approval). It is recognized that this information may change during the course of migration planning or detailed design. This document essentially represents the major components of a technical architecture design deliverable. If a draft technical architecture design document is available containing the information required below, that can be provided in lieu of sections 3 - 11.

For systems migrating to the VDC: If there will be changes in the type or level of service/support after migration to the VDC, changes should be noted in the appropriate section of this document.

For questions on completion of this form, please contact Dave Lass (VDC, dlass@csc.com, 203-317-5037)

1. Project Name, Description and Contact Information

- Provide a brief overview of the project, who the project sponsor is, who the users are, the business purpose of the application, and expected users per day and peak concurrent users

- List contact information for the project tech arch lead, project manager, and SFA Business Owner

- List recurring project Tech Arch meeting schedule

Overview

The Student Loan processing Center (SLPC) processes forms that enable the Department of Education to administer, monitor, and control the Federal Family Education Loan Program (FFELP). The SLPC is maintained and operated by the current FFELP contractor, Raytheon Systems, Incorporated.

The Student Financial Assistance (SFA) office is identifying ways to reduce unit cost while delivering improved student financial aid capabilities to students, schools, and financial partners. In support of SFA's objectives, the Financial Partners Channel has decided to improve its current Lender payment and reporting processes, which today requires manual intervention that is both costly and labor intensive. This functional design document details the requirements necessary to meet the objective. The project will involve coordinated activities with the FFEL Retirement IPT and the various FMS implementation due to the critical dependencies.

The Lender Participation Questionnaire (LPQ) is used to collect Lender information that SFA uses to establish a central Lender file used to store individual Lender data in association with individual Lender numbers. This process will become web-enabled. All Lenders must complete this LPQ process prior to submitting a Lender Invoice (currently ED799).

FFEL currently processes the Lender's Interest and Special Allowance Request and Report (ED Form 799) in an IDMS database. ED Form 799 is used by SFA and the Department of Education to record interest subsidies, special allowance payments due Lenders, record and collect origination and Lender fees, and to obtain information on a Lender's portfolio under the FFEL program (Stafford Loans, Federally Insured Student Loans, PLUS Loans, Supplemental Loans for Students (SLS) and

Consolidation Loans). A Lender must submit the form for each quarter it requests payments from ED and for each quarter it owes origination fees to ED. The ED Form 799 may currently be submitted in hard copy or electronically via EDI. This task order will include the development and design of a new Lender Invoice that is web-enabled or provide the File Transfer to submit via the internet which integrates with SFA/FMS Oracle.

In addition, the collection of the Sallie Mae monthly offset fees and Consolidation Loan Rebate fees is currently a manual process performed by Mellon Bank and recorded in a Lender miscellaneous income sub system maintained by the FFELP contractor. Also, miscellaneous checks are currently received by SFA CFO staff and manually key into the system. Lastly, individual checks and electronic fund transfers received by Raytheon's SLPC are applied against Accounts Receivable or recorded as origination fee income (treated as a gratuitous payment). These collection functions will be automated to process through Treasury's Pay.gov system that will be integrated with FMS.

Purpose

The purpose of this document is to provide a detailed functional design for the redesign of the FFEL Lender Reporting System that is required for Phases III and IV of the SFA FMS modernization effort. This document is a compilation of the FFEL Lender Payment Process requirements gathered throughout the project.

A functional design answers the question ***"What requirements have the user representatives communicated to the SFA Financial Management System Integrated Program Team (SFA FMS IPT)?"*** Phase III consists of the following initiatives:

- FFEL Program (FFELP) Lender Reporting System

In order to successfully implement Phases III and IV, it is important that there be a common understanding of the functionality that will be delivered and that the scope of work is controlled. This document reflects the agreed scope of ***what*** will be delivered for FFEL Lender Reporting System Redesign in Phases III and IV. Modifications to this design may be submitted and will be managed through the change management process. An impact analysis will be performed and an assessment of how best to accommodate the request will be made.

In addition to defining scope, functional designs serve other purposes such as input to testing and user training. In short, this document:

- Provides a common agreement of the functionality to be provided
- Demonstrates understanding of user requirements
- Describes the business rules for the re-engineered Lender Reporting System
- Serves as the basis for the development of the Lender Reporting System
- Provides input for testing scenarios
- Provides input to user training
- Provides input to technical design

Contact Information
Project Manager – Kimberly J Congdon
SFA Business Owner – TBD
Tech Arch Lead – TBD

User Traffic Information
Number of users/ day – 250
Peak Concurrent users – 200

2. Project Milestone Dates

- List key milestone/target dates: IRB, Task Order Signed, development / test / stage / production environments required, PRR date, Migration date, Go-Live date. For environment dates, please list the date that each environment is first required to be available.

TO #73, Development Region – DEV2

Milestone Dates
LAP Go Live Date – End of March
LaRS Go Live Date – End of June

Environment Dates
LAP Test Environment – 25th February 2002
LaRS Test Environment – 15th April 2002

3. Migrating Systems' Existing Technical Architecture Description
(Sections 3 and 4 are directed at describing the current environment, prior to migration to the VDC)

- Provide logical and physical diagrams of all development, test, stage, and production systems with server names and IP addresses. If applicable, include names and IP addresses of remote access locations
- Include specific hardware platform, operating system, database, application software, middleware, etc…
- Indicate number of production, standby, and test systems
- Indicate any unique systems (i.e. hot standby, clustering, redundancy, etc.)

LaRS Existing Technical Architecture is consistent with FMS

4. Migrating Systems' Existing Technical Architecture Hardware and Software Inventories

- Hardware Inventory: Show all existing development, test, stage, and production servers prior to migration

Computing Environment	Server Name / IP Address	Server Manufacturer & Model, Serial #, Asset #, etc.
Development Application Database		
Test Application Database		
Stage Application Database		
Production Application Database		

- Software Inventory: Show version / revision levels for software on each computing environment above. Include all development, test, stage, and production servers prior to migration

Component	Version Information	Installation Tier	Number of Users
Operating System			
HP Unix	11.0	Data and Application Server	
Compilers			
C/ C++		Data Server	
Internet Server			
Database			
Oracle	8.0.5	Data Server	
Application Server			
Oracle Web/ Application Server	3.0.2	Application	
Other Application tools			
Oracle Applications Oracle General Ledger Oracle Payables Oracle Receivable Oracle Assets	Release 11.0.3	Application Server	
Oracle Public Sector Applications Oracle Public Sector General Ledger	Version 3.3 for Release	Application Server	

	Oracle Public Sector Payables **Oracle Public Sector Receivables**	**11.0.3 of Oracle Applications**			
	Oracle U.S. Federal Financials **Oracle U.S. Federal General Ledger** **Oracle U.S. Federal Payables** **Oracle U.S. Federal Receivables**	**Version 3.3 for Release 11.0.3 of Oracle Applications**	**Application Server**		

5. System Technical Architecture Requirements at the VDC

- Provide logical and physical diagrams of all development, test, stage, and production systems to be utilized at the VDC – include server names and IP addresses. If applicable, include names and IP addresses of remote access locations.

- **Include specific hardware platform, operating system, database, application software, middleware, etc…**
- **Specify individual server boxes if possible (SU22E4, SU35E10, HPV2, etc.)**
- **Show all interfaces to other applications and indicate their location (if outside the VDC)**

- Indicate key architecture decisions pending (i.e. hardware platform, database, number of servers)

- What software development platform will be used?

LaRS System Technical Architecture Requirements will be consistent with FMS

6. Application Development

- Where will application development be done?

- Who will do application development (VDC client, VDC client partner, third party contractor)?

- What development services (i.e. systems admin, development DBA) will be required of the VDC?

Application Development Server: DEV2

Application Development will be done by Third Party Contractors

The VDC will be responsible for system administration procedures, which will include code migration.

7. Operations Support

- Who will do application maintenance and production support (VDC, VDC client partner, third party contractor)?

- Is the VDC required to perform reboots?

- Is the VDC required to start/stop processes?

- Is the VDC required to do performance analysis and reporting?

- The VDC will monitor the network, hardware, and operating system. What additional automated monitoring is required by the VDC?

- What manual monitoring is required of the VDC?

- Will the VDC be required to be involved in:
- **Audit trail tape mounts?**
- **Job scheduling?**
- **Periodic processing (i.e. weekly, month end, year end)?**
- **Special business tasks (i.e. special reports, microphiche tapes, etc.)?**

- What other maintenance is required?

- Provide copies of software maintenance contracts for software that the VDC will support

LaRS Operations Support will be consistent with FMS

8. Backups **- What types of backup are required (i.e. disk-to-disk, disk-to-tape, database, full, incremental)?** **- What backup frequency?** **- What number of tapes for each backup?** **- What type of backup tape?** **- How many tapes should be in the backup pools?** **- Is off-site storage required?** **- How often will tapes be sent off-site?** **- When will tapes be returned?** **- Will there be any long-term archival / storage of off-site tapes?**
LaRS Backup procedure will be consistent with FMS

9. Network Connectivity Requirements **- List or diagram required methods for access to the application (i.e. web, virtual private network, EDNet). Include all connectivity to off-site development environments or other systems** **- List requirements for developer remote access** **- From what locations (IP addresses)?** **- What type of access (read, write, change, delete)?**
LaRS Network Connectivity Requirements will be consistent with FMS

10. Database Requirements

- List requirements such as expected database size, OLTP vs. data warehouse, magnitude of expected transaction and data volumes, system availability requirements (24x7 vs. 8-5 weekdays), etc.. Specify database requirements for development, test, stage, and production if possible. For database size, provide rough estimates of database size in gigabytes by quarter over the next year.

Expected Increase in Database Size – approximately 400MB per quarter

Development and Test database exist as a part of FMS.

11. Privacy and Security

- Does this system store Privacy Act information (i.e. individual borrower information)? How will privacy act data be protected?

- Is this system a 'system of record' (i.e. does it create a new database of information associated with individuals such as individual borrower information)?

- Briefly describe how the major security concerns (availability, confidentiality, integrity, and auditability) are addressed

- What major security and encryption techniques will be employed (i.e. application userID/password, VPN, secure socket layer, digital certificates, etc…)?

- Can existing enrollment processes for VPN or TIVWAN be leveraged for enrolling users (i.e. collecting user information for creating userIDs)?

- Can lightweight directory access protocol be used?

- State verification that persistent cookies will not be used (persistent cookies are not allowed at the Department of Education, for example – session cookies are allowed to maintain state)

LaRS Privacy and Security requirements will be consistent with FMS.

12. Help Desk (Migrating Systems)

- Is there currently a formal Help Desk? What are the responsibilities? Provide Help Desk telephone number and contact name.

A LaRS Help Desk will be established prior to the LAP and LaRS production release. The Help Desk will answer user questions and maintain user accounts.

Preliminary Requirements for VDC Resources Form

Appendix